

COMMENTS ON LOW POWER FM
RM-99-25

Dear sir;

I am writing you to express my support of the recent low power initiative and to make comments on the associated rule making. I am a broadcast engineer serving full power stations in the north east. My name is known to the commission, having filed numerous applications and amendments, and having owned in the past two stations, both located in small new england towns.

However it is as a concerned citizen that I write you today. You obviously are aware of the mass consolidation in station ownership that has taken place in the last few years. I have no quarrel with multiple station ownership, but I am very worried the consolidation process will accelerate as the economy of scale available to large operators undermines the viability of standalone operations. Current FCC regulations do not appear to prevent one entity from owning all of the broadcast stations in the country, or even most of the stations in all of the major markets, thus controlling the information to a majority of the people. In three short years we already have moved several major steps toward that scary scenario. I feel that low power fm could have an important benefit by helping to keep control of broadcast media from becoming concentrated in the hands of to small a group of people.

At the same time, I note the increasing number of persons interested in broadcast ownership. Our allocation schemes and deployment of new services over the years has continually opened new avenues for interested persons to enter into broadcasting. Historically we have always had entry level opportunities for people interested in getting into the broadcast field. Unfortunately the current ever increasing spiral in broadcast station pricing and the lack of available new channels has raised the bar so high that few if any new persons will ever again be able to afford to purchase a full power broadcast facility. Thus, the deployment of a new service makes perfect sense in continuing our historic policy of making broadcasting available to a wide range of economic and social classes of our citizens. The creation of new broadcasting opportunities is especially relevant when one considers the recent rapid population growth of Hispanic and other cultural subgroups that have traditionally been highly under-represented in media ownership. My examination of the technical criterion you have published seems to indicate reasonable numbers of low power FM availability in most parts of the country, leading me to believe that low power FM can fill the needs of many of the people now asking for their chance to enter this field.

II. Observations on real world signals

1. In the real world it is possible to receive signals at a much lower level than the 60 dbu normally used to show the coverage of a station. This means that most stations have coverage areas much larger than one would expect by looking at a standard coverage map.
2. In the real world measured signal strengths are almost always lower than the FCC method (Bullington) predicts. Interfering signals are especially reduced, which implies that it might be possible to either increase station powers, or reduce the spacing requirements, allowing more stations to occupy the band.
3. The primary interference I note is from the first adjacent channel. Second and third adjacent channels do not seem to generate interference even when the station being received is well beyond its licensed coverage area. Typically, third adjacent channels can be 50 to 70 dB higher than the channel being received before interference is noted. I have several situations where a station is being received and re-transmitted at the transmitter site of a third adjacent channel.

Based on the above, it seems to me that the allocation scheme that the Commission has proposed for the low power service would be very workable. I am in favor of having it adopted just as you proposed it. However, I would not be in favor of added bandwidth restrictions as I believe it could cripple the industry, and make the signal almost non-receivable on standard receivers. If interference questions still remain, it would seem much more wise to increase the distances between stations, or lower the allotted power than to make the stations broadcast a signal that could not be received, and which would require much more expensive equipment to generate.

The Commission has asked whether this service should be commercial or non commercial in nature. I believe that any service has to have the means to support itself. I would suggest that the experience we have had from the docket 80-90 stations tends to argue that small stations have a difficult time at best supporting themselves. Therefore I support a policy that would allow licensees to raise funds any way they see fit, including the sale of commercial time. As to channels in the reserved band, these channels should remain reserved for the use of qualified non-commercial broadcasters, whether they be full power or low power applicants.

The Commission has also asked if licenses should be issued on a first come first serve or lottery basis. I believe that a lottery would be counterproductive, both in terms of number of stations deployed and in terms of commission resources. As I have examined various cities across the country there appears to be multiple channels available in most locations. With so many resources available, it seems wiser to take applications first come first serve and let those who do not come to apply in a timely manner move down the road a few miles and find another opportunity.

I applaud the speedy process the FCC is planning in order to provide construction permits in a timely manner. At the same time I am concerned that the implementation of this service may generate unplanned for volumes of applications, leading to backlogs similar to those that occurred with the low power television service. Therefore I would like to suggest a two stage strategy; a preliminary application window that limits the initial surge of applications and a more general application window following some time later.

During the initial window opening a number of things could be done to prevent backlogs and delays. Among them, accepting only one application per party, taking applications region by region (one week to a region), and accepting only applications that meet certain tightened guidelines (for example, only those whose center of radiation is between 30 and 100 meters off the ground, thereby avoiding concerns over RF radiation, and FAA approval)

There have been a number of people who are opposing Low Power FM on the grounds that it may interfere with digital FM. LPFM addresses serious constitutional issues, brings fair and reasonable access to the airwaves to individuals and groups who now, though they highly desire it, are denied the right to broadcast, and opens the door of service to rural villages and metropolitan communities who now have no hope of representation on the radio dial. It is a matter of grave concern to me that the Commission would even consider abandoning the low power concept because of a suggestion of potential interference to a service whose potential benefit, if any, is yet to be determined, whose technical standards are not yet even specified, and whose proponents freely admit that they are bringing the idea to the table in the US after having the technical governing bodies of a number of other countries reject their proposals. Let us rather tell the proponents of in band digital fm that they need to bring us a proposal that can function reasonably with both the stations that we now have and the new stations that we will, however they are allocated, need to bring on the air in the next decade. It has been suggested that the IBOC signal is especially vulnerable to first adjacent channel interference. The low power FM proposal allocates channels with respect to the first adjacent signal at the same protection ratios as full power FM stations. If the IBOC signal will suffer unbearable interference from the small spot of coverage that is a lpfm signal, I don't see how it can survive at all against the multitude of short spaced and over powered grandfathered class B and C stations that both create and receive interference at much higher levels than any LPFM.

Finally, I thank you for the opportunity to participate in this process. So often in the past proposals of this sort have fallen on deaf ears with those responsible for making policy. In spite of the opposition of those already in the broadcast industry, it seems clear that the majority of Americans will benefit greatly from this new service. It is a breath of fresh air, and I hope and pray that those who gain these new licenses will use them wisely and with integrity.

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